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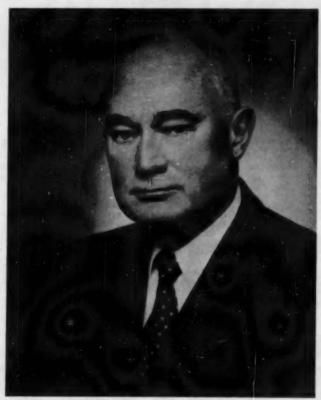
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CHEMIST

VOLUME XXXIII

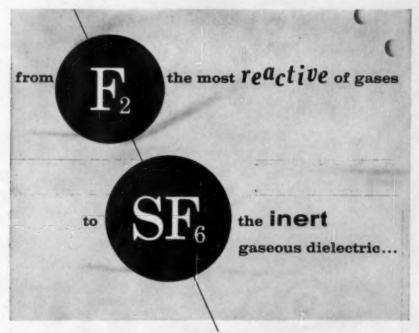


NUMBER 9



Harold F. Wakefield, F.A.I.C.

Receives Honor Scroll of New Jersey AIC Chapter
(See Page 355)



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September, 1956

Number 9

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SCHEDULED FOR EARLY PUBLICATION

Sixteen Years of Chemical Education in China, Dr. Peter P. T. Sah Should Consulting Engineers Advertise? (Reprint), Richard L. Moore, F.A.I.C.

Award of Western AIC Chapter Honor Scroll to George Parkhurst. New York Chapter Honor Scroll to Dr. C. N. Frey, F.A.I.C.

Professional Recognition, Dr. Ray P. Dinsmore, Hon. A.I.C.

What Management Expects of the Chemist, George L. Parkhurst

Communications: The Chemist's Viewpoint, Dr. Johan Bjorksten, F.A.I.C.

Coordinating Fundamental and Industrial Research, Dr. Charles N. Frey, F.A.I.C.

THEME: The qualities needed (besides technical proficiency) for success. There are helpful suggestions in this issue for employers, for employees who are just beginning their careers, and for chemists and chemical engineers of experience.

COLOR ON COVER: Commemorating the Perkin Centennial. In 1856, William Henry Perkin produced the first synthetic dye, mauve.

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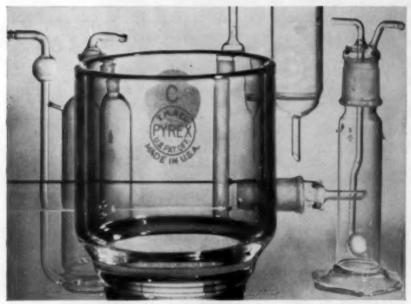
Editorial: A Guide for Employers of Chemists and Chemical Engineers _351 **Special Announcements** What Are Your Problems in Attaining Professional Recognition? Speakers Wanted • Appointments • Club Exchange Tickets "... But Chemistry Did More for Me." H. F. Wakefield, F.A.I.C. 355 The Career of Harold F. Wakefield, Dr. Foster D. Snell, F.A.I.C. 356 Presentation to Harold F. Wakefield 358 Let's Talk About Your First Job, Dr. Ray P. Dinsmore, Hon. AIC. 361 Managing Yourself, Your Job, and Others. Richard B. Davis ... 365 The Qualities Industry Seeks in Technical Personnel. 369 C. J. Mayberry ... Council 372 AIC Activities 376 Will You Come 376 377 Opportunities Something New _ 378 382 Condensates

TO COME IN OCTOBER

George L. Parkhurst, vice president and director of Standard Oil Company of California, brings a practical message to all industrial chemists who aspire to succeed above the average, through his paper on "What Management Expects of the Chemist." He received the Honor Scroll of the Western AIC Chapter this spring. Dr. Ray P. Dinsmore, Hon. AIC, former AIC president, emphasizes "Professional Recognition," and points out how chemists and chemical engineers can "rise to full professional stature by accepting the responsibilities that go with our special position in society."

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EDITORIAL

A Guide for Employers of Chemists and Chemical Engineers

IN a statement of official views on "Professional Standards", published by the Council of The American Institute of Chemical Engineers, 25 W. 45th St., New York 36, N.Y., there is a well-stated section which deals with the employer's influence on professional status. Although the word "engineer" is used throughout, readers of THE CHEMIST are asked to substitute, mentally, for "engineer", the words "chemist and chemical engineer." This will at once make the following statement a clear guide to employers who wish to utilize fully the talents of their technical men:

The Employer's Influence

Although professional standing will not be destroyed or degraded by any adverse local environment, its free influence and effect may fall short of the ideal if circumstances are sufficiently unfavorable. For example, the professional chemical engineer cannot do his best work or hope to give maximum satisfaction if his employer fails to deal with him as a professional man. The competent employer shares with the individual engineer a determination to maintain the professional character of engineering and sees to it that his organization supports that standard.

Even with the best intentions em-

ployers and engineers at times may fail to have a common viewpoint. Progressive employers, however, have found various methods that are effective in promoting good relationships with professional personnel.

Professional Recognition

The following sound practices in dealing with professional people are cited as examples:

Making it obvious that the engineer belongs to the management team and that his findings influence management policy.

Maintaining effective lines of communication from top management to the non-supervisory engineer.

Establishing that engineers are professional employees as distinguished from technicians and other nonprofessional workers with whom they may be associated.

Awarding as much recognition to the individual professional man as circumstances permit by affording merited opportunity to attend engineering-society meetings and by giving him credit in reports and publications.

Minimizing assigned work of a kind that does not challenge the engineer's ability and capacity.

Exercising care that assignments to engineers conform with recognized professional principles.

Personal Recognition

Consideration of the employer's attitude toward the professional engineer has led to a number of tested principles, which employers doubtless find applicable to other groups of employees as well:

Recognizing each engineer as an individual and always providing an opportunity for him to express his own views.

Encouraging advancement and stimulating professional interest by adopting methods by which progress can be measured.

Instituting a training program through which the promising engineer may prepare for promotion.

Making certain that each engineer is informed periodically of his progress and shortcomings so that it is clear that promotions are based on merit.

Advancing those with superior ability before they become dissatisfied with their future prospects.

Making clear the distinction between job security and opportunity for advancement and the price that must be paid for each.

Financial Recognition

It is beneficial to base the remuneration of engineers on the following practices:

Keeping a fair and reasonable pay differential between the engineer and the non-professional employee. As hiring rates increase, making corresponding revisions in the existing salary structures.

Maintaining a competitive position as to salaries and merit increases and finding means of assuring the engineering staff that this is being done.

Rewarding merit consistently and avoiding the complaint that it is secondary to seniority.

General Suggestions

In general, the employer can assure both the young and the seasoned engineering employee that his professional status is recognized by:

Giving the young engineer wise counsel with respect to the course of events in his first few years, when training and experience must precede rapid advancement.

Helping him to learn to appreciate the qualities of leadership and to develop his own leadership talents.

Showing just consideration to the rewards and privileges of the experienced and competent engineer in comparison with those of younger men employed under present circumstances.

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SPECIAL ANNOUNCEMENTS

What Are Your Problems In Attaining Professional Recognition?

John H. Nair, president of THE AMERICAN INSTITUTE OF CHEMISTS, is seeking specific information concerning the problems which AIC members encounter in their personal efforts to attain professional recognition and standing. His address is: 1500 Hudson Street, Hoboken, N.J.

We hope that many of our members will avail themselves of this opportunity to unburden themselves concerning the problem of professional status as they see it. The general information in such letters will aid the National AIC Council in planning an effective program for advancing the professions of the chemist and the chemical engineer.

Speakers Wanted

The Louisiana Chapter of THE AMERICAN INSTITUTE OF CHEMISTS welcomes speakers on professional subjects from other parts of the country. AIC members, or members of any scientific society that stresses professional relations, who may be traveling in the New Orleans area are requested to write to Harold A. Levey, 8127-33 Oleander St., New Orleans 18, La., giving him the time of the expected visits and the subjects on which they wish to speak. Meet-

ings of the Louisiana Chapter can be arranged, usually, to correspond with these visits.

Appointments

AIC President John H. Nair has made the following appointments with AIC Chapters:

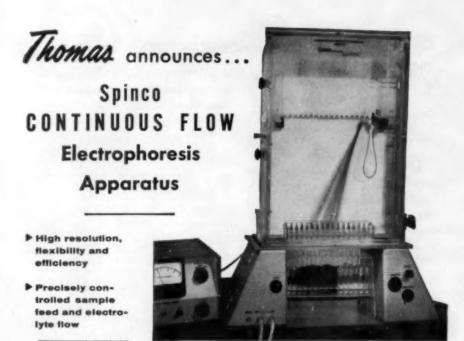
Sept. 28, 1956, he will meet with the executive council of the Ohio Chapter, Cleveland, Ohio, and will confer with the 1957 Annual Meeting Committee in connection with the 1957 Annual Meeting in Akron, Ohio.

Oct. 5, 1956, he will attend the meeting of the Chicago Chapter at which the Honor Scroll will be presented to Dr. Lloyd A. Hall, F.A.I.C.

Oct. 23, 1956, he will speak before a meeting of the New Jersey Chapter in Newark, N.J., on "Attaining Professional Status."

Club Exchange Tickets

From time to time, THE AMERICAN INSTITUTE OF CHEMISTS receives a few club exchange tickets to Broadway shows in New York city. AIC members visiting New York (or residents) are invited to inquire at the AIC headquarters office, Room 829, 60 E. 42nd St., New York, N.Y., to see if any of the discount slips available at the time are of interest to them.



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"... But Chemistry Did More for Me"

H. F. Wakefield, F.A.I.C.

Bakelite Company Division, Union Carbide & Carbon Corp., 30 E. 42nd St., New York 17, N. Y.

(Remarks when the author received the Honor Scroll of the New Jersey AIC Chapter, May 3, 1956, in Newark, N. J.)

THE presentation has been complimentary indeed. It recalls the story told by a recent Nobel Prize Winner about an unfortunate young man who was accused, tried, convicted, and jailed for an offence he did not, and in fact, could not have committed, simply because the evidence was so flattering that he could not bring himself to deny the charges. . . .

I have asked myself the questions, How and why does a man get into a situation whereby he receives such a citation? Why do some people get involved in the workings of technical and professional organizations while others do not? These seem to be the reasons:

- He probably believes with Teddy Roosevelt, who once said that every professional man owed a percentage of his time to his profession. That is just another way of saying that he believes in pulling his own weight.
- He will have a gregarious nature and a constitutional inability to say no...
- He will have a liking for people and a capacity for having fun out of human relations.

There is a fourth factor which, while it may or may not have any bearing on the individual's personality, must be present. The family of the individual must be exceedingly confident or highly indifferent to his nights out!

There are many such people in chemistry. For example, over 300 are doing their part in the North Jersey ACS Section alone. Such people are the antithesis of the individual who does not even join an organization, but who tries to justify that by saying, "The society never did anything for me, why should I join?"

These people who try to pull their own weight are no different from other chemists except for the three characteristics I have noted. They include all degrees of ability and brilliance. They are not even all extroverts, many are far from it, including myself, but for most of us, and much so for me, all of it is fun.

I started my chemical associations in Chicago where I knew and held as examples of professional conduct such men as Bill Hoskins, Lee Lewis, Rocky Whitmore, Larry Redman, A. V. H. Mory, Carl Miner, F. W. Willard, Gus Egloff, and Otto Eisenschiml, and many others, all men

willing to carry their end and pay their debt to a society and a profession that had served them well and to a society that meant much to them.

Later in New Jersey we found the same type of pleasant associations. One, the late Bob Moore, prominent in both ACS and AIC activities and a founder of the latter, was my closest personal friend in the profession; working and playing with him is one of my most pleasant memories.

It is a fallacy to believe that one can pay a debt to a profession by serving its societies in any capacity. The debt increases with the serving and one can never catch up but must eventually give up.

In addition to the many rewarding friendships growing out of society contacts, I have been fortunate in that the company which has employed me for thirty-two years has given all of its technical staff an opportunity to partake of professional and community affairs.

During my long association with New Jersey chemists it was unavoidable that for many I should develop a sincere respect and affection. I can only be pleased with this evidence that at least some feel the same toward me. This scroll will always be a reminder to me that I received so much reward for such a pleasant activity.

The Career of Harold F. Wakefield

Dr. Foster Dee Snell, F.A.I.C.

Foster D. Snell, Inc., 29 West 15th St., New York 11, N.Y.

(Presented when Mr. Wakefield received the Honor Scroll of the New Jersey AIC Chapter, May 3, 1956, in Newark, N.J.)

HAROLD Wakefield was born in Wellington, Kansas, in 1896. When Oklahoma became a state in 1907, the family moved to Medford, Oklahoma. (I suspect that sentence of being a non-sequiter but I am not sure!) Later in Woodward, Okla., he must have had a troubled school life for his father was superintendent of schools!

At Southwestern College, Kansas, he majored in chemistry under Prof. R. B. Dunlevy, who influenced him to transfer to the University of Wisconsin for his last year of undergraduate work.

After a stretch in the Chemical Warfare Service during World War I, a job at the Solvay Process Company showed him that there were still things to learn, so back he went to Wisconsin. Two years as assistant to the late Prof. Victor Lenher earned him the M.S. degree. After working a few months in the plastics department of the Reynolds Spring Company, Jackson, Michigan, he was employed by the late Dr. L. V. Red-

man, then director of research for the Bakelite Corporation in Chicago. After two years in the Chicago Research Laboratory, transfer was made to Bloomfield, N.J. There his work in resins has led to a series of technical articles and patents starting in 1923. The articles range from analysis for tellurium to studies of specific properties of resins, such as measurement of the adhesion of dried films and of the flow characteristics of plastics. His patents range from phenolformaldehyde resins and their applications in lacquer, varnish, and drying-oil compositions, to methylphenol-nitrogen compounds used in polyesters. I recall his struggling with the formulation and production problems of water-proof "Band-Aids" long before they were named.

In 1945, he was transferred from Bloomfield to the Sales Department in New York and then back to the Development Department, where he now has the title of manager of the Industrial Products Division of the New Products Development Department of the Bakelite Company Division of Union Carbide and Carbon Corporation. Just imagine that title on his badge at a convention of company executives!

Society Activities

In addition to his salaried professional work, Wake has been active in many technical societies and professional groups. He has been a Fellow of THE AMERICAN INSTITUTE OF CHEMISTS since 1935. He was a

member of the Society of Rheology and was publishing editor of its journals for five years. As a member of the American Chemical Society since 1917, he has served as chairman of the North Jersey Section, the second largest Section, in 1948-9, He worked for thirteen years on the National Council, and for three years was a member of its important and hard-working Council Policy committee. For five years he was chairman for the North Jersey Section of the Indicator policy committee. In this post he cooperated in drawing up the first written contract which the Section had with the business manager of the Indicator, a contract which is merely renewed at five-year intervals. While holding that post, he was instrumental in establishing the system of assistant editors, one for the North Iersey Section and one for the New York Section.

Among the other scientific and professional Societies to which Wake belongs are: The Chemists' Club, TAPPI, Gamma Alpha, Sigma Xi, and Alpha Chi Sigma. In the latter fraternity he has been active for many years and he was president of the New York professional Chapter in 1940. He has served as Eastern professional counselor and has been a member of the Pure Chemistry Award Committee.

In his professional, as well as his personal capacity, Wake has always been ready to help a friend. An example of this was when Bill Sparks and Bob Thomas approached Wake in the early days of their experiments on butyl rubber, to talk about polymers. In the course of the conversation, when the question of milling came up, Wake invited them to bring their samples over to his place and run them on a mill in one of his laboratories. They did this. I believe it was the first milling experience of importance on butyl rubber. Sparks and Thomas eventually became co-inventors of butyl rubber.

Home Life

In 1936 Wake married Nancy Kennedy who, with her sympathetic nature, has been a great help and inspiration to him. They have two children, William (sixteen) and Roxanne (twelve). Wake is a collector, not of stamps but of something some people consider more useful. Maybe the idea is derived from his dry

Kansas background. He collects pitchers, steins, and antique and contemporary bar glasses. Around the bar of The Chemists' Club, Wake used to be known as "Hail Fellow, well met." He still is, but in the past two years, he like Jackie Gleason, has been fighting the battle of the bulge, what the English call "slimming." Wake has always been a gourmet since I have known him. Years ago he started a hobby of cooking and was famed among his friends for the excellent dishes which he prepared himself. It is still a hobby, one which his wife no doubt appreciates. Another thing he likes to do is to fish . .

To sum up, Wake is an hardworking, faithful, and productive worker in his professional field, and a generous warm-hearted friend in personal relations.

Presentation to Harold F. Wakefield

THE New Jersey Chapter of THE AMERICAN INSTITUTE OF CHEMISTS presented its Honor Scroll to Harold Wakefield, manager, Industrial Products Division of the New Product Development Department, Bakelite Company Division of Union Carbide & Carbon Corporation, New York, N.Y., at a dinner held at the Military Park Hotel, Newark, N.J., May 3, 1956.

Dr. Cecil L. Brown, chairman of the Chapter presided. Dr. Foster D. Snell introduced Mr. Wakefield, who received the Honor Scroll from Dr. Brown. Mr. Wakefield responded with a discussion on some of the benefits of professional society membership. (See preceding pages for these talks.)

AIC Student Medals were presented to the following outstanding senior students of chemistry or chemical engineering in New Jersey: Gordon G. Hammes of Princeton University, sponsored by Prof. David Ga*vin; Alfred H. Kalantar of Rutgers University, sponsored by Dr.



Dr. Cecil L. Brown presents Honor Scroll to Harold F. Wakefield.

Charles E. Erickson, and Mr. Basil Wasyliw, of Newark College of Engineering, sponsored by Prof. Thomas J. Tully.

The guest speaker was Dr. Mason W. Gross, provost of Rutgers University, who talked on "Higher Education in New Jersey." He referred those interested in the subject to the "Report on the Future of Higher Education in New Jersey," by Dr. Marshall Smith, which is available from the State Department of Education, Trenton, N.J.

A reception to Mr. Wakefield, preceding the dinner, was sponsored by the Bakelite Company, a division of Union Carbide and Carbon Corporation.

The citation on the Honor Scroll reads:

To Harold F. Wakefield

In recognition of his professional activities as shown by his quiet devotion to helping and inspiring individual scientists throughout the chemical industry; for personal contributions to development and utilization of plastics; and for his unselfish participation and leadership in local and national organizations working in the interests of science.

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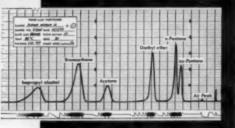


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Let's Talk About Your First Joh

Dr. Ray P. Dinsmore, Hon. AIC

Chairman of the Board of Directors of The American Institute of Chemists (Presented at the "Young Chemists' Night" held by the Chicago AIC Chapter, April 6, 1956, Chicago, Ill.)

OUR objective in The American Institute of Chemists is to serve our profession to the best of our ability. Passing along some thoughts that may be helpful in developing careers is, in a small way, returning something of the benefits which others have extended to us.

First, I shall make some general observations about your professional careers, after which perhaps some more specific suggestions will be in order.

Even though you are about to take up your life work at a time which is favorable to the competent scientist, your future success must continue to depend upon hard work. This is because new information is coming in at an accelerated rate and its assimilation is becoming a serious problem to every professional chemist. You will frequently wonder, when you see others more easily reaping larger financial rewards, why you selected a career which demands so much hard work. The intellectual satisfaction that comes from high accomplishment and the knowledge that you are serving society by fulfilling your best possibilities are the offsetting compensations with which you must be content.

Those who have refused to con-

sider chemistry because of the hard work involved in its learning have not the courage and ambition to make good citizens. Those who selected it merely because they thought it a way to make a living, will probably find it only that. I wish particularly to communicate to those of you who selected chemistry because you felt it contained the key to many of nature's mysteries and that you might have the talent to manipulate that key.

Your studies have further stirred your imagination and you are anxious to apply the knowledge you have obtained, gaining experience and facility, so you also may make new discoveries and push back a little more the barrier of ignorance which we touch at every turn.

Let me say to you, "Don't get too impatient. There are for most of you still things to learn and adaptations to make before you can move very far along the road you have chosen."

Even in my day as a student, we realized that the sciences were in many respects interdependent. We knew also that mathematics was a valuable aid in the practice of any scientific profession. Now, however, the physical sciences are overlapping more and more. It is still more evident that mathematics is becoming

the common denominator, or, if you will, the universal language.

In fact, it is becoming clear that future applications of the physical sciences will be facilitated by applied mathematics and the use of electronic computers. So I would warn you to keep careful eye on these aids, because an understanding of their use is going to be essential not only to the progress of science but to the operation of industry. Do not let your mathematics get rusty. You are going to need it increasingly. If you can, take some supplementary courses when the opportunity offers.

When you go to a job in industry, it is more than likely that you will be given a chance to take a training course to familiarize yourself with company practices and to learn about the various operations of the company. If you are taking cooperative courses or get a summer job between scholastic terms, you are almost certain to be given work which will help you to add to your professional training and to visualize its applications to industry.

Both of these opportunities are valuable in readjusting your viewpoint, which has necessarily been limited to the university atmosphere where the emphasis is almost entirely on your learning and not upon the application of your knowledge.

When you enter industry, the training course makes a good transition. Even so, the atmosphere is different. You are in a new environ-

ment and much of your thought is given to sizing up that environment—the work and the people. Don't be deceived. They are also sizing you up to see how you fit; how you respond to advice and change of scene; how you work with others; and how intelligently you fit your training to new conditions.

A little later you will be assigned to a definite job. If you have been oversold on your importance as a unit of society, perhaps because of all the talk about shortage of scientists and the many flattering job offers you have received, you may be disappointed in what may appear to you to be slow and unsatisfactory progress. Unless you are on highly specialized research you must prepare for an "incubation period" in which you are expected to absorb the methods and atmosphere associated with your job; learn to know as many people as possible, get some grasp of how the team works on which you are, as yet, only a rookie.

Don't be too quick to form judgments, either about people or their technical methods. Remember, the company impressed you favorably as an outsider. This is not a charitable institution. It is engaged in the competitive business of making useful goods for sale at a profit which must be continued if your salary is to be paid. Some methods, which may seem crude or unscientific are perhaps adequate and the best which can be justified by the cost. This is not a

simple process, involving elementary arithmetic. It is a complicated section of our social fabric. Study it critically, but test your criticisms silently, at least for a time. Turn for advice to older members of the organization who have gained success in the direction you would like to move. Most of them will be willing to answer questions and make useful suggestions, if they are convinced you are sincerely desirous of learning.

If you are not creative in your ideas or if you have no initiative to make them useful, my best advice is to accept leadership and follow instructions to the best of your ability. If you have original and creative ideas, try to find superiors who are progressive and who welcome new viewpoints. However, recognize the fact that, to accomplish much you must be a team worker. Don't be disappointed if you can't have things all your own way. Try to learn how to get your ideas tried out and adopted with the least friction. You will need that experience later.

Don't be afraid to do a little manual work, especially in the beginning. It gives you a "feel" of the job and a sympathetic understanding for the workmen. Don't, however, become an individual who must do everything himself because he does not know how to get others to do it the way he wants it. Particularly, learn to dictate notes to a dictaphone or to a stenographer. If such timesavers are not at first available to you, try to get some practice anyhow, even if you have to borrow a dictaphone after hours. This will save you time in later years; it will teach you to organize your thoughts without writing them down and it may (forlorn hope) teach you to be concise.

Most of your life you must work with people to accomplish your best results. Learn to do so early. Your first obligation is to know your professional field and to utilize that knowledge with integrity. The next obligation is to give your employer what he pays for, personal skill and your best judgment. Finally, you should always be aware that you owe society in general and your own profession a debt for your knowledge, which you must make a conscious effort to repay. Take an interest in some community activities, learn to know people in other lines of work and thus become an active useful citizen.

When you are gaining a formal education you go to people and institutions that specialize in teaching the subjects you need to learn. It is an often-neglected truth that most people are specialists in some one or more useful ways. Often these specialties are not in their regular line of work, they pertain to avocations rather than vocations. It follows then that useful knowledge can be gained from nearly every intelligent person, if you know what his specialty is and

can persuade him to tell you about it.

The fact that is not always appreciated is that this is also the best way to draw a person out, attract his attention and create in him a friendly feeling towards you. It may not be so much the talking you do that counts in the impression you make as it is how much you can get the other fellow to do. This is a good method of approach when you are trying to get on a friendly basis with a variety of types and classes of people, such as you are likely to run into and depend upon for help in an industrial job.

As I look back on my first industrial job it seems to me that I had more faults than virtues. My views with regard to chemical processes were oversimplified. I thought methods were entirely too empirical. I felt sure that I could put things on a more scientific basis as soon as I found out just what was taking place in various of our rubber reactions. I haven't yet found out all that is taking place, but it was a good idea anyway! This, in a crude fashion illustrates the adjustments one must make. Instead of pure materials and exact controls, one has impure materials and imperfect controls. Problems come not from textbooks, but from people and factory conditions.

Beyond all this lie the purposes

and policies of the organization, which are frequently complicated and subject to change from economic and other pressure. Effective teamwork requires good communications both up and down. The ability to summarize your results in a concise accurate fashion helps your end of the communications and endears you to the boss.

If you associate yourself with the local section of the INSTITUTE, the chemical society, or the chemical engineers and take an active interest in the programs and discussions, you will gain valuable knowledge and experience. Through this and other means you may get acquainted with civic leaders. If you have a church association, you have another means of integrating yourself into the life of your community, a process which is important to your professional development as well as to your place as a human being in a complicated society.

If anything here leads you to think that I am preaching conformity to rule and routine, may I now add that this is not precisely true. We must all understand and work within a certain pattern, if we are to be effective social units. However, progress depends upon change which is best produced by originality and creative thinking. Know the pattern but don't be imprisoned by it. Above all, keep your own special talents and let them grow.

Managing Yourself, Your Job and Others

Richard B. Davis

Employment Supervisor and Veterans Employment Representative, Louisiana Department of Labor, Division of Employment Security, New Orleans, La.

(Presented at a joint meeting of the Louisiana AIC Chapter and the Louisiana Section of the American Chemical Society, Tulane University, April 20, 1956.)

MANY employers set up all kinds of job specifications, but in the final analysis they may employ on a whim or on minor characteristics. However, there are certain tools that every employer expects his employees to be able to use successfully. These include the ability to listen, think, and communicate. Listening includes using the eyes and the ears efficiently; communication embraces writing and speaking effectively.

A man who was observed talking to himself, when asked why, said, "I like to talk to a smart man and hear a smart man talk." This story points up the basic reason why most of us do not listen effectively-we are too concerned with ourselves. We further block our listening powers by prejudices concerning the subject or person and by day-dreaming. The listening rate is four times the speaking rate and that leaves time for wool-gathering. Many of us listen in order to reply to the speaker, not to understand him but rather to refute his remarks. Finally, we may only pretend we are paying attention to the speaker. A good listener is not only popular, he also learns something.

Listening with the eves or reading

is a skill most of us can improve upon by correcting bad habits. The first step is to be sure our eyes are not defective. Then we should consider bad habits such as reading too narrow a span at one time; taking in too few words at each glance; fixation-looking at each word group for too long a period; lack of concentration; rereading phrases; inward speech or speaking each word to ourselves as we read; a poor vocabulary, or lack of ability to understand the full significance of words. A large, effective vocabulary is essential to any person with aspirations for work success. Weak thought organization or inability to grasp the ideas presented will often contribute to poor readership, as will a lack of practice. The perfection of any skill is accomplished only by correcting bad habits and by practicing correct techniques.

The method of reading should always be coordinated with the purpose. Some material should be skimmed while other data should be read intensively, depending on the purpose. Newspaper articles have essential facts in the headlines and in the first paragraphs. The meat of technical articles is usually covered in

the first and last paragraphs. The table of contents and index in a book offer valuable clues for skimming.

Has someone said to you, "A penny for your thoughts," and did you feel they were not worth that much? Yes, many of us spend much time dreaming . . . We need to awake from spiderweb thinking-get out of our rut . . . Many of us get in bad habits and need to get out of the rut. Orderly thinking and analyses of problems can be cultivated and developed. The human mind has untapped capacities and resources that we need only to understand and use. Problems allowed to simmer a few days in the mind are often solved readily. It is fear and lack of confidence that prevent us from realizing the full potential of our minds. Let us lift ourselves out of the rut of spiderweb mental activity by thinking, understanding, and reacting.

Communication involves two things, speaking and writing. In all types of speaking, we need to sell our listeners on our sincere interest in them; to illustrate our ideas so all can grasp them; to keep on our objective without rambling, and, to give our listeners something to take away with them.

The three essentials of writing are: Clearness, conciseness, and completeness. Clearness depends largely on correct word usage. A dog can be hot or four-legged. "Run" can refer to a stocking or a race. . . . The same word will often mean different things to different people. Care in word usage is essential.

The trend in business and government is toward more conciseness. The elimination of useless verbiage without sacrificing completeness is essential to modern business communication. Winston Churchill is an excellent example of an expert in the field of communication. The Bible remains the best example of effective communication. The "Sermon on the Mount" by the Master Christian, and the "Writings of Paul" have never been equalled. Anyone who would excel in the art of communication would do well to study the Bible.

Four factors should be considered in managing yourself, your work, and others. You should properly perceive, prepare, plan and perform in each of these categories. The first step in understanding yourself is to keep an open mind and be ever ready to seek new experiences and set new goals. The Bible quotation, "With all thy getting, get understanding", is as true today as when first said. The best self-preparation is to study, read, and participate in wholesome activities.

It is also important to maintain physical and mental health. In planning to manage yourself more effectively, set definite objectives and a method of obtaining these objectives through a daily and monthly timetable. The best plans are of no avail without performance. Effective performance is the ability to be resourceful, make daily decisions that are

impartial, and to carry out all tasks. Confidences must be kept, a sense of humor maintained, criticism accepted willingly, emotions controlled for self-management of the highest order.

One of the interviewers at our local office tells me that more professional people fail to get jobs because of personal characteristics; such as, poor appearance, inability to express themselves, and failure to get along with others, than because of insufficent education or experience qualifications.

To manage your work, however, it is necessary to gain knowledge of the technique and processes in your field and to grasp developments and their implications before they are perceptable to others. In other words, it is important to maintain an open mind. Proper preparation includes getting all the facts and weighing all factors in any situation before arriving at a plan of action. Any plan will include getting the most out of each business day and setting specific goals for achievement on the job. Good job performance requires efficient organization of men, materials, and processes, so that the work is kept moving on a definite schedule. It is also important to check the project for completeness and look for ways to improve the entire operation.

Many men engaged in research activities that require them to work by themselves often overlook the importance of working with others and William E. Phillips, Inc. 435 N. Michigan Ave., Chicago 11, III. Midwest Agent

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gaining a better understanding of their co-workers. To gain the cooperation of others, it is important to prepare by analyzing the work to be done, obtaining the available person for the job, and adapting the work to meet the needs of the group. Then, the workload should be apportioned and the most capable worker assigned to each task. Proper performance in working with others will include the delegation of authority so that results may be achieved harmoniously and without antagonizing anyone. The ability to convey ideas and inspire coworkers and the knowledge of when to criticize and when to praise should not be neglected.

The development of understudies is also an important duty of anyone

who would work successfully with others. The individual should also be an expert in maintaining discipline and morale. In short, he should have the ability to organize, deputize, supervise, and analyze any function assigned to him.

The large business concerns recognize the importance of one word, "Service." For them to be successful, it is essential that they serve the public, the customers, the stockholders, and the employees. Service is made up of the following attributions: Sincerity, energy, reverence, vision, integrity, courage, and enthusiasm. Sincerity is most essential. It was best expressed by Emerson, "What you are speaks so loud, I cannot hear what you are saying."

Energy involves the use of time and effort to the accomplishment of any worthwhile objective. It also involves the maintenance of one's health and the proper utilization of time. Dissipation of either will have a deleterious effect on service.

Reverence for God and man is a vital quality that makes it imperative for the individual to live and practice religion as understood by him. Vision is the ability to see beyond and above . . . Integrity means that your word is your bond and that whatever you say you will do. You should follow through or let the person involved know immediately why you cannot do so. Courage is the ability to stand for what you be-

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lieve and to take the necessary ac-

Enthusiasm is most important for any task. It is from the Greek and means "With God." Carnegie, the great steel builder, considered enthusiasm the most important attribute of his workers. So, when building for work success, we should not overlook the important word, "Service,"

In summary, we need to get rid of preconceived ideas in managing ourselves, our job, and others, and to develop the ability to listen, think, communicate, and act, effectively.

Moved: Dr. Lincoln T. Work, F.A.I.C., consulting engineer, former AIC president, to Room 809, 36 W. 44th St., New York 36, N.Y., from 420 Lexington Ave., New York, N.Y. In addition to his private practice in engineering and research, he will work jointly on some projects with P. E. Landolt, F.A.I.C., with whom he is located.

Moved: The Standard Scientific Supply Corp., to 808 Broadway (near 11th St.), New York 3, N. Y.

The Qualities Industry Seeks in Technical Personnel

C. J. Mayberry

Chief Chemist, Chalmette Works, Kaiser Aluminum & Chemical Corp., P. O. Box 1600, New Orleans, La.

(Presented at a joint meeting of the Louisiana AIC Chapter and the Louisiana Section of the American Chemical Society, Tulane University, April 20, 1956.)

MY first reaction in considering the qualities that industry seeks in technical personnel was that industry does not know what it wants! After some investigation, I became convinced that this is not quite true... Industry may not know exactly what type of person it seeks in every case, but it certainly has a better idea than it did some twenty years ago. I also believe that the technical graduate of today knows more about what goes on in industry than he did a few years ago.

Today we have large competitive industries whose ultimate purpose is to make money. This may sound a little blunt, but profit is still the basic incentive of our productive economy. Industry today is complex in operation and keenly competitive. It moves at a fast pace.

Many technical graduates, chemists, and engineers are becoming the leaders (supervisors and managers) of modern industry. More and more, the leader in industry needs a technical degree and sound technical ability. In addition to his background and ability, a technical graduate must fit into the non-technical world. He

must not become a specialist tightly fitted into his own slot. He should develop a broad approach. In doing this he should not lose sight of his immediate goals, but the broad concept will help him to see his job in a more realistic light.

Even in a job which requires a high degree of specialization, he must possess the aptitude to sell himself and his ideas to others. He must, through aggressiveness and drive, and by successfully working with others, be able to carry a specific project to completion. (Thinkers who do not take action are of little value.) A job not carried to completion is like a gravimetric determination that does not precipitate. To complete a project, or to put a good idea in use, requies the practice of good human relations. This may seem to be overemphasized, but it is true that while very few people fail in industry because of the lack of technical ability, many fail because of their inabilities in human relations.

Kenneth Salisbury, in the General Electric Review (May, 1952), said that "skill in human relations implies an innate personal kindness, a tolerance toward the shortcomings of others. Above all, it requires fairness in dealing with people and a generosity of spirit. In a supervisor it requires a comprehension of the things that motivate the individual, a recognition of his merits, and a knowledge of his weaknesses."

The engineer or chemist in a growing, complex organization cannot confine himself to one specific field. He should have some knowledge of accounting (since costs are important,) labor relations, industrial engineering, statistics, management (which includes planning, organizing, and communicating), and other fields not usually associated with chemists and engineers. As an example, the analytical chemist in industry must, because of the development of instrumentation, be versed in physics and electronics as well as analytical chemistry. In order to maintain and develop a successful analytical program, he should be able to sell management his products which are analytical results.

It may appear that industry seeks some combination of an Einstein or a Dale Carnegie with a strong back. The development of a broader approach, however, is not to produce the Jack-of-all-trades type. It is aimed at the development of versatile specialists who are better able to apply their technical abilities as leaders in our growing, competitive industries.

This quest for the broad outlook in Kaiser Aluminum employees is not confined to the post-employment period. It begins in the company's important college recruitment program, through which our leaders of the future are chosen. The recruitment procedure begins with the visit by a two-man recruitment team to the college campus. The team usually is composed of one industrial relations man and one technical man. They interview prospective employees and fill out an evaluation form on each candidate. No offer is made at this time. The evaluation form has a rating system of from 1 to 5; 1 at the top, and 5 at the bottom. The evaluation is broken down into ten categories.

Those who rate in the top half of those interviewed are invited to the plant for a one-day visit and further interviewing. They are interviewed at the plant by a four-man team which consists of three department heads and always one industrial relations man.

For example, a chemical engineer interested in production might be interviewed by the production manager, the potroom superintendent, the chief engineer, and the industrial relations superintendent. The industrial relations man emphasizes company philosophy, labor policy, growth and development of Kaiser Aluminum, and fringe benefits. The others explore work history, extra curricula activities, education, and character traits. Each member of the team spends about an hour with the pros-

pect, and after the interview each one fills out an evaluation form.

At the end of the day the prospect meets the works manager. The works manager does not make the decision to hire, but relies on the judgment of the plant interviewing team. If a majority of the team agrees on the evaluation, he may be offered a job on the spot. If he qualifies, the only reasons he is not made an offer are: (1) Several others with similar backgrounds are coming in; (2) The quota for his qualifications has been filled. In any event, he is notified within two weeks.

Kaiser Aluminum's exhaustive recruitment methods are not unusual in modern industry. More and more, industry seeks in its new people, not only the technical skill, but the human qualities which will assist them in assuming positions of greater responsibility in the organization. For industry knows that among all of its assets the quality of its people is by far the most important.

Conference: On Chemistry and Physics of Pigments, starts Oct. 8, 1956, at Newark College of Engineering, in cooperation with the New York Paint, Varnish and Lacquer Association, and the New York Paint and Varnish Production Club. For information: Special Courses Div., Newark College of Engineering, 367 High St., Newark 2, N.J.

Appointed: Dr. August H. Ho-

meyer, F.A.I.C., as director of market research in the medicinal chemical field, by Mallinckrodt Chemical Works, St. Louis 7, Missouri. Dr. Homeyer was formerly associate research director of the company.

Elected: As president of the American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa., R. A. Schatzel, F.A.I.C., who is vice president and director of Engineering of the Rome Cable Corp., Rome, N.Y.

Moved: The New York Regional Sales Office of the Chemical Products Division, Archer - Daniels - Midland Co., to 225 Broadway, New York 7, N.Y.





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June Meeting

The 310th meeting of the National Council of The American Institute of Chemists was held June 20, 1956, at 6:00 p.m., at The Chemist's Club, New York 17, N.Y. President John H. Nair, presided.

The following officers and councilors were present: A. W. Fisher, Jr., L. A. Hall, H. B. Hass, F. A. Hessel, D. B. Keyes, G. Kirton, J. H. Nair, G. L. Royer, M. Sittenfield, and L. Van Doren. Dr. L. T. Eby, chairman of the Committee on Membership; J. Kotrady, chairman of the Qualifications Committee; Dr. J. D. D'Ianni, co-chairman of the 1957 Annual Meeting Program Committee, and V. F. Kimball were present.

President Nair stated that he would try to visit each AIC Chapter during the year. He would like to know what activities interest the membership. He announced that members in one area are exploring the idea of forming a new chapter.

It was decided to form a committee to deal with the subject of expansion, particularly with the formation of new chapters, the committee to consist of five per-

President Nair stated that we need to know more factually the problems that AIC members meet in connection with their professional advancement.

The Secretary reported that the current membership of the Institute is 2963 members.

The Secretary announced with deep regret the following deaths: Dr. Joseph S. Friedman, Fellow, on May 10, 1956; Dr. Henry Briggs North, Life Member, on May 24, 1956, and Dr. Frederick G.

Zinsser, Fellow, on Jan. 20, 1956. The Council observed a moment of silence in

their memory.

Upon motion, the Central Planning Committee for Annual Meetings was approved, and the President was asked to appoint a representative of the Midwest and a representative of the West Coast to this Committee, whose other members are: the Chairman of the Board, the President, the President-elect, the Secretary, and the Treasurer.

Upon motion, the President was asked to appoint a Committee on Clinical Chemistry, to consist of three persons.

President Nair announced that the date of the 1957 Annual Meeting has been set for May 22-24, 1957, to avoid conflict with the ACS Division of Rubber Chemistry meeting during the previous week. The Annual Meeting will be held at the Sheraton-Mayshower Hotel, Akron, Ohio.

The Secretary announced that Dr. L. T. Work, chairman of the Committee on Gold Medal Award, is seeking nominations from the membership for the 1957

award.

The Secretary announced that President Nair will present a Scroll of Greetings from the INSTITUTE to the Society of Chemical Industry at its 75th Anniversary

Meeting in England.

Meetings of the National Council will be held on October 10, 1956; December 12, 1956, and February 13, 1957, at The Chemists' Club, New York, N. Y. On May 21, 1957, a Council meeting will be held at the Sheraton-Mayflower Hotel, Akron, Ohio, just preceding the Annual Meeting.

Upon motion, the following persons, recommended by the Board of Directors, were granted Emeritus status: G. S. Bratton, Dr. Ernest D. Clark, Col. Marshall J. Goss, William B. O'Brien, Dr. Joseph

Rosin, and Dr. John E. Schott.

Dr. Royer, chairman of the Committee on Manpower, announced that the Committee is preparing a report on the employment of chemists over forty, and that it would report from time to time on what other groups are doing about the manpower situation.

Dr. Eby reported for the Committee on Membership and stated that he would continue to seek the cooperation of the

Chapters.

Dr. Hall reported on the activities of the Chicago Chapter.

COMMERCIAL CHEMICAL DEVELOPMENT

Surveys. Technical and Economic Evaluations. Application Research. Operating Cost Studies. Financial Reports. Profit Estimates. Recommendations for Acquisitions and Expansions.



President Nair announced that Dr. Hall will receive the Honor Scroll of the Chicago Chapter, October 5, 1956, at a meeting at the Furniture Club in Chicago,

Dr. Fisher reported for the New England Chapter.

Mr. Kirton reported for the Ohio Chapter.

Mr. Sittenfield announced that the Pennsylvania Chapter plans to meet with the American Chemical Society Section in December. The Chapter will present its Honor Scroll in January.

Mr. Kotrady reported that the New York Chapter's Honor Scroll had been presented to Dr. Charles N. Frey in

June.

Dr. Eby stated that four meetings are planned by the New Jersey Chapter and that President Nair will speak at the first meeting in October.

Dr. D'Ianni discussed possible program features for the 1957 Annual Meeting.

Upon motion, it was decided to set up a Public Relations Committee, to include a representative from each of the Chapters.

The recommendations of the Executive Committee in connection with the award of student medals were accepted, and the following procedure was adopted:

 The custom of giving AIC associate memberhip for one year to student medalists is now discontinued.

(2) A subscription for one year to THE CHEMIST will be given to student medalists.

(3) Those who become student medalists in 1957 and following years are eligible to compete for a \$100.00 prize by submitting an essay on "Chemistry or Chemical Engineering as a Profession."

(4) All who enter the contest will be given an additional two years' subscription to The Chemist.

President Nair was asked to appoint a committee of three to adminster this student medal program for the coming year.

Dr. Hass reported as chairman of the Ethics Committee.

President Nair was asked to appoint a committee of three to reconsider the objectives of the AIC and the requirements for membership, the Committee to be headed by Dr. A. W. Fisher, Jr.

The following new members were elected:

FELLOWS

- BRADWAY, Dr. Elizabeth M.
 - Chief Chemist, Borden Food Products Co., 600 N. Franklin St., Syracuse 4, N. Y.
- BRYAN, Dr. Carl E.
 - Research Chemist, General Labs., U. S. Rubber Co., Market & South Sts., Passaic, N.J.
- BURCH, Dr. James M.
- Production Supervisor, Mallinckrodt Chemical Works, St. Louis, Missouri.
- COOPER, Willis M.
- Assistant General Manager, Research & Engineering Div., Monsanto Chemical Co., 1700 S. 2nd St., St. Louis 4, Mo.
- DAVISON, Dr. Albert W.
- Consulting Chemist & Chemical Engineer, 1199 Moundview Ave., Newark, Ohio.
- FANCHER, Dr. Otis E.
- Head, Organic Chemistry Section, Miles-Ames Res. Lab., Elkhart, Indi-
- FEAZEL, Dr. Charles E.
- Head, Applied Chem. Div., Southern Research Inst., 917 S. 20th St., Birmingham 5, Ala.
- FEINSTEIN, Dr. Louis
- Supervisory chemist & principal biochemist, U.S. Dept. of Agr., Marketing Research Div., Biological Sciences Branch, Beltsville, Maryland.

- FELDMAN, Dr. Milton H.
- Advisory Scientist, Westinghouse Atomic Power Div., Box 1468, Pittsburgh 20, Pa.
- FINELLI, Dr. Anthony F.
- Organic Research chemist, Goodyear Tire & Rubber Co., 142 Goodyear Blvd., Akron, Ohio.
- FINSTON, Dr. Harmon L.
- Associate chemist & supervisor of radiochemicals, analytical section, Dept. of Nuclear Engineering, Brookhaven National Lab., Associated Universities Inc., Upton, L.I., N.Y.
- FITCH, Bryant
- Director of Research, Dorr-Oliver, Inc., Westport, Conn.
- FLETCHER, Dr. Lewis A.
- Professor of Chemistry, Brenau College, Gainesville, Georgia.
- FOLT, Vernon L.
- Research chemist, B. F. Goodrich Co., Research Center, Brecksville, Ohio.
- FRANCIS, Richard J.
- Manager & Consulting Engineer, Francis Industries, 45 N. Guilford Ave., Columbus, Ohio.
- FROST, Dr. Albert E., Jr.
- Chief Research Chemist, Dow Chemical Co., 875 Waverly St., Framingham, Mass.
- FULLER, Dr. Joseph A., Jr.
 - Staff Administrative assistant to manager, Exploration Res. Dev. & Tech. Service, Calif. Research Corp., Box 446, La Habra, Calif.
- FUZEK, Dr. John F.
- Research Group Leader-Physics Group, North American Rayon Corp., Elizabethton, Tenn.
- GAYLORD, Dr. Norman G.
- 47 Hillary Lane, Westbury, New York.
- HAINER, Dr. Raymond M.
- Research Physical Chemist, Arthur D. Little, Inc., 30 Memorial Drive, Cambridge, Mass.
- HILL, Dr. Henry A.
- General Manager, National Polychemicals Inc., Eames St., Wilmington, Mass.
- HOLLY, Dr. Earl D.
- Chemist, Dow Chemical Co., Physical Res. Lab., 280 Bldg., Midland, Michigan.

HORTON, Dr. Charles A. 384 East Drive, Oak Ridge, Tenn.

HORTON, Prof. Norman H.

Assistant Professor of Chemistry,
Georgia Institute of Technology, 2636
Christmas Lane, N.E., Atlanta, Georgia.

HOVEY, Marion W.

Chemist, U. S. Bureau of Mines, 1600
E. First South St., Salt Lake City, Utah.

HUBER, Dr. Wolfgang
Chemical Consultant, 68 Bret Harte
Terrace, San Francisco 11, Calif.

JORDON, W. Alec Chemical Business Consultant, 270 Park Avenue, New York 17, N. Y.

KALICHEVSKY, Vladimer A.
Consulting Chemical Engineer, Magnolia Petroleum Co., P.O. Box 3311, Beaumont, Texas.

KANZELMEYER, Dr. James H.
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AIC Activities

New Jersey Chapter

Chairman, Dr. Max Bender Chairman-elect, Dr. W. R. Sullivan Treasurer, Dr. Curt Bamberger Secretary, Dr. John F. Mahoney, 1000 Woodmere Drive, Westfield, N.J. National Council Representative, Dr. Cecil L. Brown

Attaining Professional Recognition

The New Jersey Chapter will hold its first meeting of the season, Oct. 23rd, at the Military Park Hotel, Newark, N.J. Dinner, served at 6:30 p.m. will precede the meeting at 8:00 p.m. For reservations, please contact Dr. F. A. Lowenheim, chairman, Program Committee, P.O. Box 471, Rahway, N.J. (FUlton 1-3000).

John H. Nair, president of THE AMERICAN INSTITUTE OF CHEMISTS, will speak on "Attaining Professional Recognition." He will show that the younger chemist tends to assume that his employer will recognize his professional status, but that this is not necessarily true. The chemist himself and his organizations, such as the AIC and the ACS, have to act positively. The chemist has a responsibility to show by his actions that he is worthy of professional recognition.

All AIC members and interested persons are invited to attend both the dinner and the evening program.

A meeting of the Chapter Council at 5:30 p.m. will precede the dinner. Present and future plans of the N.J. Chapter will be discussed by the chairman, Dr. Max Bender, and the following 1956-1957 committees:

Program Committee, Dr. F. A. Lowenheim, Chairman

Student Awards Committee, Robert H. Seavy, Chairman

Honor Scroll Committee, Dr. Delmer L. Cottle, Chairman.

House Committee, James E. Abel, Chair-

Publicity Committee, Oliver E. Sheffield, Chairman

Will You Come

- Oct. 5, 1956. Chicago Chapter. Dinner Meeting. Furniture Club, Chicago, Ill. Presentation of the Honor Scroll to Dr. Lloyd A. Hall, F.A.I.C., technical director, The Griffith Laboratories, Inc., Chicago. For information: Miss Rose Marie Brunetti, Armour Research Foundation, IIT, 10 West 35th St., Chicago 16, Ill.
- Oct. 10, 1956. Dinner Meeting. National AIC Council and Board of Directors. The Chemists' Club, 52 East 41st St., New York 17, N. Y.
- Oct. 23, 1956. New Jersey AIC Chapter. Military Park Hotel, Newark, N.J. Council Meeting 5:30 p.m. Dinner 6:30 p.m. Meeting 8:00 p.m. Presiding, Dr. Max Bender, Chapter chairman. Speaker, John H. Nair, AIC president, "Attaining Professional Recognition." For reservations, Dr. F. A. Lowenheim, P.O. Box 471, Rahway, N.J. (FUlton 1-3000).
- Nov. 1956. (Date to be announced). New Jersey Chapter, Dinner and meeting. Subject: Education. For information, Dr. F. A. Lowenheim, Program Chairman, P. O. Box 471, Rahway, N.J.
- Dec. 1956. (Date to be announced). Pennsylvania Chapter. Joint meeting with American Chemical Society. For information: Dr. A. M. Immediata, International Resistance Corp., 401 No. Broad St., Philadelphia, Pa.
- Dec. 12, 1956. National AIC Council and Board of Directors. Dinner Meeting. The Chemists' Club, 52 East 41st St., New York 17, N. Y.
- Jan. 1957. (Date to be announced.) Pennsylvania Chapter. Presentation of the Honor Scroll. For information: Dr. A. M. Immediata, International Resistance Corp., 401 No. Broad St., Philadelphia, Pa.
- Feb. 13, 1957. National AIC Council and Board of Directors, Dinner meeting. The Chemists' Club, 52 East 41st St., New York 17, N.Y.

Feb. 26, 1957. New Jersey Chapter. Plant Trip. Visit to RCA Research Laboratories, Princeton, N.J. 2:00 p.m. Registration required prior to plant visit.

May 1957. (Date to be announced) New Jersey Chapter. Military Park Hotel, Newark, N. J. Cocktails 6 p.m., dinner 7:00 p.m. Annual awards, program and speaker. Student medals will be presented to outstanding students of chemistry in the New Jersey Chapter area.

May 21. 1957. National AIC Council and Board of Directors. Dinner Meeting. Sheraton-Mayflower Hotel, Akron, Ohio.

May 22-24, 1957. Thirty-fourth Annual Meeting. THE AMERICAN INSTITUTE OF CHEMISTS. Sheraton-Mayflower Hotel, Akron, Ohio.

Opportunities Doris Eager, M.A.I.C.

AIC members who are seeking positions may place notices in this column without charge.

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ence and qualifications. Available immediately. Box 752, Dayton 1, Ohio.

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Chemist - Female. College graduate. Major in chemistry. Six months to one year's experience, preferably in food field. Apply to Hearst Magazines, 309 West 56th St., N.Y. Take typed resume covering education and experience.

Associate Technologist. M.S. inCh.E. (1 year exper.) or B.S. in Ch.E. (3 yrs. exper.) Top ½ of class, willing to travel. Process design and economic studies; major research projects; assist in planning and scheduling experiments. Age to 30. Salary \$6,500-7,600.

Jr. Technologist. (2) B.S. in Ch.E. Basic eng'g work, development activities, pilot plant studies, preparation technical

reports, etc. or research in chem. eng'g phase in development and application of processes to new or improved food products. Under 30. Salary \$4200-5400.

Jr. Technologist. B.S. in Chem., Food Tech., Agri. Chem. for applied research. Age to 30. Salary \$4,200-\$4,800.

Technical Librarian. Literature chemist to conduct literature searches for related research.

For the above positions apply to Employment Office, General Foods Corp., Central Laboratories, 1125 Hudson St., Hoboken, N.J.

Energy Resources Conference: To be held in Denver, Colorado, Oct. 29-31, under the auspices of the National Resources Council of the Denver Chamber of Commerce. Request information from the Denver Chamber of Commerce, 1301 Welton

St., Denver 4, Colorado.

Honored: Arthur W. Carpenter, F.A.I.C., at a dinner held by Committee D-11 (on Rubber & Rubberlike Materials) of the American Society for Testing Materials, at its 59th Annual Meeting. Mr. Carpenter was retiring as secretary of the Committee after having served it in that capacity for the past twentyeight years.

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Something New

"Aluminum Formate in Crystalline Form." Technical Bulletin. Aceto Chemical Co., Inc., 40-40 Lawrence St., Flushing 54, N. Y.

"Some Reasons Why the Norelco 20 & 75 Angstrom Electron Microscopes Deserve Your Consideration." Folder. North American Philips Co., Inc., 750 S. Fulton Ave., Mt. Vernon, N. Y.

"Catalog, Apparatus, Vacuum Gauges & Diffusion Pumps." Kontes Glass Co., Spruce St., Vineland, N.J.

"Biochemical & Organic Preparations." Catalogue. Sigma Chemical Co., 4648 Easton Ave., St. Louis 13, Mo.

"AIR-PAK. New packaging program for laboratory glassware." Bulletin. Doerr Glass Co., Vineland, N.J.

"Ultra-High Temperature Crucible, Fisher-Borolite." Information. Fisher Scientific Co., 717 Fisher Bldg., Pittsburgh

"Bulletin C197R-Chemicals and other products derived from tin, antimony, and zirconium." 6 pp. Metal & Thermit Corp., 100 E. 42nd St., New York 17, N.Y.

"Non-Metallics for Impeller Pump Use." Folder. Eco Engineering Co., 12 New York Ave., Newark, N.J.

"PVC Pipe & Fittings." Bulletin PE-40. Plant Equipment Sales, Corning Glass Works, Corning, N.Y.

What's New for the Laboratory." Catalog. Scientific Glass Apparatus Co., Inc., Bloomfield, N.J.

"Beckman Recording Spectrophotometers." Bulletin 405. Beckman Div., Beckman Instruments, Inc., Fullerton, Calif.

"Fungistatic Capacities of Aromatic Fluorine Compounds in Relation to Cloth-Rotting Fungi. Part 2, Fluorinated Phenols, Nitro-benzenes, and Anilines." 65 pp. \$1.75. Code No. PB 111591. Part 3, Fluorinated Anisoles, Benzyls, Benzoic Acids, Biphenyls, Phenols, and Toluenes. 54 pp. \$1.75. Code No. BP 111487. Part 4, Fluorinated Phenols, Benzyl Alcohol and Biphenyls. 46 pp. \$1.50. Code No. PB 111488. Order from Office of Technical Services, U.S. Dep't of Commerce, Washington 25, D.C.

1956

New Position: For Dr. Robert B. Mesrobian, M.A.I.C., who is now associate director of research, High Polymer Chemistry, of the new Central Research & Engineering Division of Continental Can Company, 100 E. 42nd St., New York 17, N.Y. He was formerly associate director of the Polymer Research Institute of the Polytechnic Institute of Brooklyn.

Scheduled: The National Science Foundation 1956-57 Colloquia Series for the first Wednesday of each month, beginning at 10:30 a.m., September 5, 1956; except the fifth meeting which will be held on the second Wednesday of January. All meetings will be held in the Board Room of the Foundation, 1520 H St., N.W., Washington, D.C. Request program from the Foundation.

Meeting: Of the Association of Consulting Chemists & Chemical Engineers, Inc., to be held at the Belmont Plaza Hotel, New York, N.Y., Oct. 23, 1956, at 5:45 p.m. Guest Speaker: L. C. Cartwright, F.A.I.C. Moderator: Maurice S. Sage. Subject: "How Consultants' Know-how Applies to Packaging of Consumer Goods."

Appointed: Paul N. Cheremisinoff, M.A.I.C., as manager of the Alsynite plant at Paterson, N.J. He was previously plant manager and technical director of Joseph Turner & Co.

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Fulbright Scholarships: Open for graduate study abroad to professional persons not now engaged in college study. November 1, 1956, is deadline for submitting applications for the 1957-58 academic year. Application blanks are available at the Institute of International Education, 1 East 67th St., New York, N.Y., and the Institute's regional offices in Chicago, Denver, Houston, San Francisco and Washington, D.C.

Degrees: To be conferred by Lowell Technological Institute, September 27th, at a special convocation in observance of the Perkin Centennial, include honorary Doctor of Science degrees for Sidney M. Edelstein, F.A.I.C., president, Dexter Chemical Corp., New York, N. Y.; Fred J. Emmerich, Hon. AIC, president, Allied Chemical & Dye Corp., New York, N.Y., Dr. H. F. Mark, F.A.I.C., director, Polymer Research Institute, Polytechnic Institute of Brooklyn; and Dr. August Merz, F.A.I.C., of American Cyanamid Company, New York, N.Y.

Honored: Simon Collier, F.A.I.C., director of quality control, Johns Manville Corp., New York, N.Y., who received the Award of Merit at the 59th Annual Meeting of the American Society for Testing Materials, in Atlantic City, N.J., "In recognition of sustained support of ASTM technical and administrative work, particularly in Committee D-11 on Rubber and Rubber-like Materials, where as long-time member and chairman since 1944 his knowledge and understanding have been so effective."

Graduate Course: On "Case Problems in Research Management", given at New York University College of Engineering, Monday evenings from 7 to 9 p.m., beginning Sept. 24, 1956. Dr. Harold K. Work, F.A.I.C., director of the Engineering Research Division, is in charge of the course. Lecturers include: Dr. Emil Ott, F.A.I.C.; Roger Lueck, F.A.I.C.; Dr. Thomas H. Vaughn, M.A.I.C.; and Dr. L. I. Gilbertson, F.A.I.C.



Abroad: Dr. Joseph W. E. Harrisson, F.A.I.C., who is visiting universities and pharmaceutical manufacturers in Denmark, France, Switzerland, Sweden, Germany, and England. Director of LaWall & Harrisson Research Laboratories, Philadelphia, Pa., he presented a paper on "A New Biologic Approach for Evaluating Antacids," before the Innational Physiologic Congress at Brussels, Belgium.

Elected: Dr. Everett G. Mc-Donough, F.A.I.C., as executive vice president of Evans Research & Development Corporation, 250 E. 43rd St., New York 17, N.Y. Dr. Mc-Donough has been vice president and general manager of Evans Research since 1946. In 1952, he was awarded the gold medal of the Society of Cosmetic Chemists for his research in the field of cosmetic chemistry.

Future Meetings: Of The Electrochemical Society, Inc.:

Sept. 30-Oct. 4, 1956. Statler Hotel, Cleveland, Ohio;

May 12-16, 1957, Statler Hotel, Washington, D.C. (Papers are being solicited for this meeting. For information, write the society at 216 W. 102nd St., New York 25, N.Y.);

Oct. 6-10, 1957, Statler Hotel, Buffalo, N.Y.

April 27-May 1, 1958, Statler Hotel, New York, N. Y.

Sept. 28-Oct. 2, 1958, Chateau Laurier, Ottawa, Ont., Canada. Honored: Dr. E. G. Klarmann, F.A.I.C., who received an honorary degree of Doctor of Science from the Philadelphia College of Pharmacy & Science, at the commencement exercises, June 11th, in recognition of his work on germicides and antiseptics. The degree was presented by Dr. Ivor Griffith, F.A.I.C., president of the College.

Annual Meeting: Of the Federation of Paint & Varnish Production Clubs, to be held at the Netherland Hilton Hotel, Cincinnati, Ohio, Oct. 21-24, 1956. The Paint Industries' Show will run concurrently with it. For information, write the Federation at 121 So. Broad St., Philadelphia 7, Pa.

Announced: By Dr. Walter J. Murphy, Hon. AIC, the appointment of Rodney N. Hader, F.A.I.C., as editor of the Journal of Agricultural & Food Chemistry, published by the American Chemical Society, 1155 16th St., N.W., Washington, D.C. He was formerly associate editor in charge of the Chicago branch office of the ACS applied journals.

New Address: For Herstein Labs., Inc., now at 44 New Street, New York 4, N.Y. Karl M. Herstein, F.A.I.C., former chairman of the New York AIC Chapter, and former national AIC councilor, is president.

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Silver Anniversary: Of the Gordon Research Conferences will be celebrated at a commemorative dinner at the Hotel Commodore, New York, N. Y., on December 27, 1956. Guest Speaker: Dr. Glenn T. Seaborg, F.A.I.C., Nobel laureate, "The Future Through Science." Reservations (\$10.00) may be made by writing to Dr. W. George Parks, director, Gordon Research Conferences, University of Rhode Island, Kingston, R.I.

Honored: By the American Society for Testing Materials at its 59th Annual Meeting at Atlantic City, N.J., John W. McBurney, F.A.I.C., retired consultant on Masonry and Masonry Materials of the National Bureau of Standards, with the Award of Merit for outstanding service. He is a Charter Member of THE AMERICAN INSTITUTE OF CHEMISTS.

Speaking Schedule: For Dr. Alexander Silverman, Hon. AIC, professor of chemistry, emeritus, University of Pittsburgh:

Sept. 18, 1956, History Division, American Chemical Society, Atlantic City, N.J., "Modern Glass at Alfred."

Oct. 9, 1956, Pittsburgh Section, American Ceramic Society, Mellon Institute Auditorium, "The Production and Properties of High-melting Glass Fibers."

Oct. 12, 1956. Glass Division, American Ceramic Society, Bedford Springs, Pa., "The Production and Properties of High-melting Glass Fibers."

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